## AMENDMENTS TO THE CLAIMS

1. (withdrawn): A method for growing cells comprising

reviving cells stored in the presence of a cryoprotectant, wherein the cells are diluted in a growth medium without removing the cryoprotectant such that cell viability is maintained, and

culturing said cells.

2. (withdrawn): The method of claim 1

wherein the cryoprotectant is DMSO.

3. (withdrawn): The method of claim 2

wherein DMSO is present in an amount of less than about 2% by volume based on total volume of cells and media present.

4. (withdrawn): The method of claim 1

wherein the cells are grown in a self-contained cell culture vessel.

5. (previously presented): A kit comprising

a self-contained cell culture vessel comprising a cell reservoir, a media reservoir, and a gas reservoir;

cells and a cryoprotectant disposed in said cell reservoir;

a liquid cell culture medium disposed in said media reservoir in an amount capable of diluting the cryoprotectant to a volume suitable for cell growth; and

gas disposed in the gas reservoir.

6. (previously presented): The kit of claim 5 maintained at a subzero temperature.

7. (previously presented): The kit of claim 5, further comprising an internal chamber.

8. (previously presented): The kit of claim 7, wherein

the internal chamber defines a space therein and has an internal surface;

the internal chamber defines at least one optionally sealable port or channel;

the internal chamber defines at least one sealable opening for receiving a gas reservoir capable of fluid communication with the internal chamber;

wherein the gas reservoir contains a valve or removable seal;

wherein the cell reservoir is capable of fluid communication with the internal chamber and defines an optional valve or seal therebetween;

wherein the media reservoir is capable of fluid communication with the internal chamber and defines an optional valve or seal therebetween;

wherein the vessel is capable of being sealed; and

wherein the vessel is made from a material capable of withstanding subzero temperatures without degrading.

9. (previously presented): The kit of claim 8 wherein the vessel further comprises

a liquid impermeable flexible partition having two sides displaced within the internal chamber, the two sides defining a first and a second space within the internal chamber;

wherein the partition is capable of exchanging gas between said first and second space;

wherein the first space is capable of containing a liquid in communication with at least one port or channel, and defines a sealable access port, and

wherein the first space is capable of fluid communication with the cell reservoir and/or the media reservoir;

wherein the second space is capable of containing a gas, and said second space is capable of fluid communication with the gas reservoir; and

wherein the edges of the partition are sealed to a portion of the internal surface of the internal chamber to prevent liquid communication between said spaces.

10. (previously presented): The kit of claim 9, wherein the second space for containing a gas is further defined by

a fluid and gas impermeable expandable wall affixed to a rigid wall of the internal chamber and forming an integral portion of the internal chamber.

11. (previously presented): The kit of claim 8

wherein one or more of the valves or seals is capable of opening and closing;

wherein at least one port or channel sealably connects to at least one additional media chamber through at least one fluid channel, wherein at least one valve or seal is displaced between each port or channel and each media chamber; and wherein the media chamber is located externally to the vessel;

wherein at least one port or channel sealably connects to at least one absorbent chamber, wherein at least one valve or seal is displaced between each additional port or channel and the absorbent chamber; and

further comprising a cell filter between each valve or seal and each absorbent chamber.

12. (previously presented): The kit of claim 7,

wherein the gas reservoir is a self-contained capsule disposed within the internal chamber.

13. (previously presented): The kit of claim 7,

wherein the gas reservoir is disposed outside the internal chamber, and is sealably connected to the internal chamber.

14. (previously presented): The kit of claim 7,

wherein the cell reservoir and the media reservoir are contained within the internal chamber.

15. (previously presented): The kit of claim 7,

wherein the cell reservoir and/or the media reservoir is a self-contained capsule.

16. (previously presented): The kit of claim 8,
wherein the seal or valve defined between the gas reservoir and the internal chamber is selected from the group consisting of a) a temperature or electrically sensitive seal; b) a diaphragm adapted to be penetrated, or c) a mechanically, thermally or electrically operated valve.

17. (previously presented): The kit of claim 16,
comprising a temperature sensitive seal and further comprising a safety seal.

18. (previously presented): The kit of claim 8,
wherein the internal chamber is removably or fixedly connected to at least one measuring device via at least one port or channel.

19. (previously presented): The kit of claim 18,
wherein the measuring device is a Micro Electro Mechanical System (MEMS) and/or high performance liquid chromatograph (HPLC).

20. (previously presented): The kit of claim 18,
wherein a port or channel defines a mechanism to provide fluid communication between the internal chamber and the measuring device.

21. (previously presented): The kit of claim 20,
wherein the mechanism is a ball valve or a perforable diaphragm.

22. (previously presented): The kit of claim 8,
wherein the internal chamber defines one or two ports or channels.

23. (previously presented): The kit of claim 21,
wherein the measuring device further comprises a member for operating the ball valve or for penetrating the diaphragm.

24. (previously presented): The kit of claim 18, further comprising a filter within the port or channel for preventing contamination in the internal chamber.

25. (previously presented): The kit of claim 8, wherein the sealable access port is removably sealed with an access port closure.

26. (previously presented): The kit of claim 8, further comprising at least one sensor externally connected to at least one port or channel or disposed inside the internal chamber.

27. (previously presented): The kit of claim 26, wherein the sensor senses oxygen, $CO_2$, or pH levels.

28. (withdrawn): A method for transporting cells from a distribution site to a transplant site, comprising

transporting the kit defined in claim 5 at a temperature suitable for maintaining cell viability to a transplant site; and

reviving said cells in said vessel at a transplant site by diluting said cells in a growth medium without removing the cryoprotectant.

29. (withdrawn): The method of claim 28, wherein the cells are islet cells.

30. (withdrawn): The method of claim 28 wherein the temperature suitable for maintaining cell viability is selected from the group consisting of minus 80° C, minus 20° C, and 4° C.